

REMARKS

This Amendment is being filed in response to the Final Office Action mailed April 3, 2008, which has been reviewed and carefully considered. Entry of the present amendment and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

In the Final Office Action, claims 1-14 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over an article entitled "Coherent Scatter Computed Tomography Applying a Fan-Beam Geometry" (Schneider) in view of U.S. Patent Application Publication No. 2002/0085671 (Sakaida) and U.S. Patent No. 7,248,726 (Sasada). It is respectfully submitted that claims 1-14 are patentable over Schneider, Sakaida and Sasada for at least the following reasons.

As correctly noted on page 3 of the Final Office Action, Schneider does not disclose or suggest, "performing a beam hardening compensation of scatter radiation data based on the acquired attenuation data and based on an energy shift of an equivalent object equivalent to the object of interest," as recited in independent claim 1, and similarly recited in independent claims

6 and 9-10. Sakaida and Sasada are cited in an attempt to remedy the deficiencies in Schneider.

Both Sakaida and Sasada are directed to energy subtraction processing, where the radiation attenuation coefficient of a substance is weighted with energy distribution of the detected radiation and averaged, where the mean attenuation coefficient varies for different thickness of the substance, as described in paragraph [0017] of Sakaida. As described in paragraph [0076] of Sakaida, less weight is applied where the radiation dose is small. On column 10, line 45-55 of Sasada, parameters related to image density shift are calculated and used to reduce adverse effects of beam hardening.

It is respectfully submitted that Schneider, Sakaida and Sasada, alone or in combination, do not teach or suggest the present invention as recited in independent claim 1, and similarly recited in independent claims 6 and 9-10 which, amongst other patentable elements, recites (illustrative emphasis provided):

performing a beam hardening compensation of scatter radiation data based on the acquired attenuation data and based on an energy shift of an equivalent object equivalent to the object of interest; wherein the scatter radiation data is based

on scatter radiation scattered from the object of interest.

Using the energy shift of an equivalent object to perform beam hardening compensation is nowhere taught or suggested in Schneider, Sakaida, Sasada, and combinations thereof. At best, any beam hardening is performed using parameters of the very same object of interest, and NOT of an equivalent object, equivalent to the object of interest.


Accordingly, it is respectfully submitted that independent claims 1, 6 and 9-10 are allowable, and allowance thereof is respectfully requested. In addition, it is respectfully submitted that claims 2-5, 7-8 11-14 and should also be allowed at least based on their dependence from independent claims 1, 6 and 9-10.

In addition, Applicant denies any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicant reserves the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of

the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

By 
Dicran Halajian, Reg. 39,703
Attorney for Applicant(s)
June 3, 2008

THORNE & HALAJIAN, LLP
Applied Technology Center
111 West Main Street
Bay Shore, NY 11706
Tel: (631) 665-5139
Fax: (631) 665-5101